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Possibilities for Including the Opportunity Cost of Time in Recreation Demand Systems

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"Possibilities for Including the Opportunity Cost of Time in Recreation Demand "

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Incorporating time costs

in recreational demand models has long been an issue in specifying and estimating these models. Because time is a scarce resource, and may pose a binding constraint in the recreational decision-making process, researchers have felt compelled to incorporate the opportunity cost of time into recreational demand models. An early way to accomplish this incorporation proposed by Gum and Martin (1974) was simply to include a time component as an argument in the demand function. Researchers abandoned this practice in favor of incorporating time costs and out-of-pocket trip costs into a single variable referred to as travel cost which serves as a proxy for the trip price. Time costs are typically assumed to be some fraction of the individual's wage rate.

This paper investigates the theoretical implications of this practice. It examines the connection between labor supply and recreational demand with a focus on conditional demand systems. The findings indicate that the standard treatment of time costs in recreational demand models may result in a misspecification.

As a remedy, we suggest using a conditional demand system based on a fixed conditioning good. We explored several possibilities for this conditioning good.